

DENNY et al
 Appl. No. 10/529,772
 May 8, 2008

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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-2 (canceled).

3 (currently amended). ~~The nitroaniline-based unsymmetrical mustard as~~
~~claimed in claim 1 selected from:~~

~~2-[(2-Aminocarbonyl)(2-chloroethyl)-4,6-dinitroanilino]ethyl methanesulfonate,~~

~~2-[(2-Aminocarbonyl)(2-bromoethyl)-4,6-dinitroanilino]ethyl methanesulfonate,~~

~~2-[(2-Bromoethyl)-2-[(2-hydroxyethyl)amino]carbonyl]-4,6-dinitroanilino]ethyl~~
~~methanesulfonate,~~

~~2-[(2-Iodoethyl)-2-[(2-hydroxyethyl)amino]carbonyl]-4,6-dinitroanilino]ethyl~~
~~methanesulfonate,~~

~~2-[(2-Bromoethyl)-2-[(2-hydroxypropyl)amino]carbonyl]-4,6-dinitroanilino]ethyl~~
~~methanesulfonate,~~

~~2-[(2-Bromoethyl)-2-[(2,3-dihydroxypropyl)amino]carbonyl]-4,6-~~
~~dinitroanilino]ethyl methanesulfonate,~~

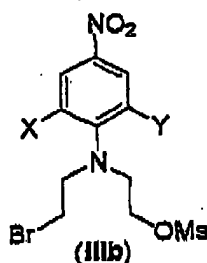
~~2-[(2-Bromoethyl)-2-[(3-(4-morpholinyl)propyl)amino]carbonyl]-4,6-~~
~~dinitroanilino]ethyl methanesulfonate,~~

~~Methyl 3-[(2-[(2-chloroethyl)(2-[(methylsulfonyl)oxy]ethyl)amino]-3,5-~~
~~dinitrobenzoyl)amino]propanoate, and~~

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Methyl 3-[[2-((2-bromoethyl)(2-[(methylsulfonyl)oxy]ethyl)amino)-3,5-dinitrobenzoyl]amino]propanoate.

4 (currently amended). The A nitroaniline-based unsymmetrical mustard as claimed in claim 1 selected from a compound represented by formula (IIIb)



wherein X, Y, are as defined in claim 1

X represents one of the groups NO₂, CN, or SO₂R¹, where R¹ represents a C₁₋₆-alkyl optionally substituted with one or more hydroxy and/or one or more amino groups;

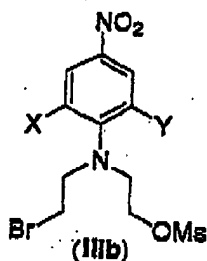
Y represents one of the groups OR², NHCOR², CONHR²CO₂R³, CONHR²morpholide, CONHR², CONR²R³, CONHOR², CONHSO₂R², SO₂NH₂, SO₂NHR² or SO₂NR²R³ wherein each R² and R³ independently represent a H, C₁₋₆-alkyl or C₁₋₆-alkylene optionally substituted with one or more hydroxy and/or one or more amino groups; and A and B each independently represent halogen, OSO₂R⁴, OSO₂NH₂, OSO₂NHR⁴ or OSO₂NR⁴R⁵, wherein each R⁴ and R⁵ independently represent a C₁₋₆-alkyl optionally substituted with one or more hydroxy and/or one or more amino groups;

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and pharmaceutically acceptable derivatives and salts thereof.

5-7 (canceled).

8 (currently amended). The A method of preparing a nitroaniline-based unsymmetrical mustard represented by formula (IIIb) as claimed in claim 4



wherein X, Y, are as defined in claim 1 for a compound of Formula (IIb)

X represents one of the groups NO₂, CN, or SO₂R¹, where R¹ represents a C₁₋₆-alkyl optionally substituted with one or more hydroxy and/or one or more amino groups;

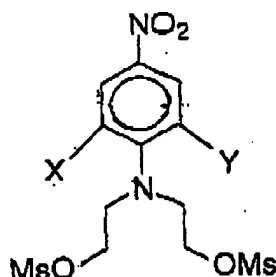
Y represents one of the groups OR², NHCOR², CONHR²CO₂R³, CONHR²morpholide, CONHR², CONR²R³, CONHOR², CONHSO₂R², SO₂NH₂, SO₂NHR² or SO₂NR²R³ wherein each R² and R³ independently represent a H, C₁₋₆-alkyl or C₁₋₆-alkylene optionally substituted with one or more hydroxy and/or one or more amino groups; and A and B each independently represent halogen, OSO₂R⁴, OSO₂NH₂, OSO₂NHR⁴ or OSO₂NR⁴R⁵, wherein each R⁴ and R⁵ independently represent a C₁₋₆-

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alkyl optionally substituted with one or more hydroxy and/or one or more amino groups;

and pharmaceutically acceptable derivatives and salts thereof;

the method ~~including~~ comprising the step of reacting a compound of formula



with an amount of LiBr in a polar solvent to give a bromo mesylate of formula

(IIIb).

9 (currently amended). The method as claimed in claim 6 8 wherein the polar solvent is selected from the group consisting of acetonitrile, dimethylformamide, ethyl acetate, triethylamine, acetone and mixtures thereof.

10 (currently amended). The method as claimed in claim 6 8 wherein the alkali metal halide is selected from ~~one or more of the following;~~ the group consisting of LiCl, LiBr, NaI and NaBr.

11 (currently amended). A compound of formula ~~(IIb)~~ (IIIb) obtained by any one of the methods as claimed in claim 6 8.

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12-15 (canceled).

16 (currently amended). A method of cell ablation therapy utilising at least one endogenous nitroreductase enzyme, wherein the method ~~includes~~ comprising the step of administering a compound of Formula ~~(IIb)~~ (IIIb) as claimed in claim ~~1~~ 4 in a "therapeutically effective amount" to ablate tumour cells in tissue in a subject, wherein said tissue expresses at least one endogenous nitroreductase enzyme, to activate the compound of formula ~~(IIb)~~ (IIIb) into an active metabolite to ablate the tumor cells.

17-18 (canceled).

19 (currently amended). A pharmaceutical composition ~~including~~ comprising a therapeutically effective amount of a compound of formula ~~(IIb)~~ (IIIb) as defined in claim ~~1~~ 4 and a pharmaceutically acceptable excipient, adjuvant, carrier, buffer or stabiliser.

20-21 (canceled).